### Monocularity and fitness for flying

C.
Di Lanka

#### Personal information

- 1. Client Name: F/O X
- 2. Age: **34+ years**
- 3. Gender: Male
- 4. Employer: CBC Airlines
- 5. Flying Hours: **5000**
- 6. Current MC: Class I





- History of having Left orbital tumour slow growing leiomyosarcoma
- Was excised 2 times. Last one was in September 2022.
- Post surgery in 2022 he had glaucoma, treated and was well controlled with medicine. Corrected vision 6/6.
- Cleared for flying duties after a <u>functional test</u>.
- Again in December 2024 he had diplopia with eye pain. MRI showed recurrent tumor with stable appearance
- No evidence of extension to intracannalicular and middle cranial fossa. Mild erosion
  of left ethmoidal sinus. Mild mass effect on the left optic nerve with mild lateral
  deviation without invasion. Normal MRI brain

left orbital exenteration done on 08.12.2024 done by a Plastic Surgeon Biopsy-

Soft tissue medial to the evaluation of the adipose tis scle, compatible with a tumour recurrence.

Need immunomarker student tumour type and grade.

Immunohistochemistry re

Appearance are in keeping leiomyosarcoma.

- He was presented to AME on use anuary 2025
- Discussed the issue with MA
- It was decided to have a medical board for evaluation & risk analysis
  of his condition and to have an accredited medical conclusion

# Medical Board to decide whether they can grant clearance with monocular vision. Can we grant clearance????

## ICAO Annex 01, Chapter 06 Standard

- 6.3.3.2.3 Applicants whose uncorrected distant visual acuity in either eye is worse than 6/60 shall be required to provide a full ophthalmic report prior to initial Medical Assessment and every five years thereafter.
- Note 1.— The purpose of the required ophthalmic examination is (1) to ascertain normal visual performance, and (2) to identify any significant pathology.
- Note 2.— Guidance on the assessment of monocular applicants under the provisions of 1.2.4.10 is contained in the Manual of Civil Aviation Medicine (Doc 8984).
- 6.3.3.3 Applicants who have undergone surgery affecting the refractive status of the eye shall be assessed as unfit unless they are free from those sequelae which are likely to interfere with the safe exercise of their licence and rating privileges.

What is provision 1.2.4.10

It is a Standard in

1.2.4.10 If the medical Sta Assessment shall not be issued or

- a) accredited medical conc whether numerical or o jeopardize flight safety;
- b) relevant ability, skill and and

auss)

## Concept of useful vision

met, the appropriate Medical

ilure to meet any requirement, e applied for is not likely to

been given due consideration;

c) the licence is endorsed with any special limitation or limitations when the safe performance of the licence holder's duties is dependent on compliance with such limitation or limitations.

#### **Doc 8984 – Manual of Civil Aviation Medicine**

11.6.2 The Annex 1 requirement for normal visual fields precludes licensing of monocular pilots except under the flexibility clause (Standard 1.2.4.10).

11.6.3 Before assessing a monocular applicant's fitness under this flexibility clause, an adaptation period of at least six months should be allowed following the loss of vision. The assessment should include practical flight testing in the case of a pilot or practical testing in the air traffic control environment in the case of an air traffic controller and should be conducted by a suitably qualified person in consultation with the Aviation Medicine Section of the Licensing Authority.

- 11.6.4 The following points should be considered by a Contracting State prior to granting a licence to a monocular pilot or air traffic controller:
- a) the nature of the flying operation airline transport, charter, agriculture, private, recreational, air traffic control;
- b) the type of aircraft fixed or rotary wing, cockpit layout including seating position of the pilot, single or multi-crew arrangement;
- c) the applicant which eye is affected, what is the status of the other eye, and does the applicant have full range of head, neck and eye movements;
- d) special tasks helicopter slung-load operations, hoisting, search and rescue, supply drops, nap-of-the-earth flying, crop-spraying, power-line inspection, multiple aircraft aerobatics and display flying. Operations involving close proximity to the ground, other aircraft, ships or people constitute high-risk flying activities.

- 11.6.6 Monocular individuals can perform many flying tasks safely, particularly in <u>multi-crew situations</u> where visual tasks can be shared. For single-seat operations it is sometimes possible to adjust seating or provide aids such as rear-view or downward-looking mirrors to compensate for the loss of peripheral vision.
- 11.6.7 In monocular individuals it is obviously important to provide optimum vision for the normal eye (correcting spectacles, sunglasses) and to minimize the risk of injury to that eye during high-risk flying activities, e.g. by use of helmet with visor to minimize injury from bird strike.
- <u>2.3.17 Medical flights or other practical tests can be utilized</u> in a number of fields such as with applicants having certain vision deficiencies (e.g. <u>monocularity</u>) or defective hearing. In these cases, the presence of a medically qualified pilot on the check flight can add greatly to the value of the subsequent reports.

#### We need to -

- Have a discussion on his condition
- To decide whether we can clear him for flying with monocular vision
- OR permanently unfit him for flying